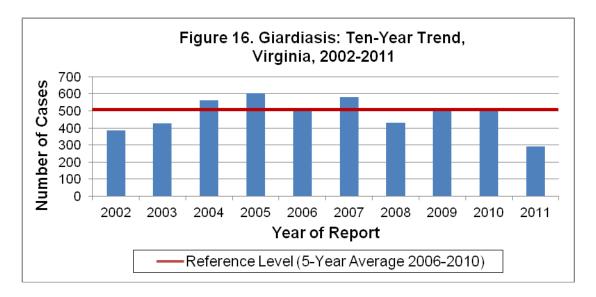
## <u>Giardiasis</u>

Agent: Giardia intestinalis (parasite)

<u>Mode of Transmission</u>: Person-to-person transmission by hand-to-mouth transfer of cysts from the feces of an infected person. Localized outbreaks are more often due to ingestion of cysts in fecally-contaminated drinking and recreational water (e.g., lakes, rivers, springs, ponds, and streams) than from fecally-contaminated food.

<u>Signs/Symptoms</u>: Symptoms may include diarrhea, abdominal pain, bloating, nausea and vomiting. A person may be asymptomatic or develop chronic illness.

<u>Prevention</u>: Hands should be washed carefully after using the bathroom, after changing diapers or cleaning a child who has used the bathroom; after handling animals or their feces; and before preparing and eating food. Recreational water or untreated water from shallow wells, lakes, rivers, springs, ponds or streams should not be consumed. Persons with diarrhea should not swim at recreational water venues.



During 2011, 290 cases of giardiasis were reported in Virginia. This is a 43% decrease from the 512 cases reported in 2010 and is similarly 43% lower than the five-year average of 508.6 cases per year (Figure 16). An investigation conducted by VDH in 2007 indicated that the increase in cases observed during 2004 through 2007 was at least partly attributed to infections identified through screening of refugees who had recently arrived in the United States, many of whom were asymptomatic. Beginning in 2011, the case definition changed to require a person to have symptoms of giardiasis. Prior to that, a case could be counted based on lab finding alone.

While the 40-49 year age group had the highest incidence with 5.0 cases per 100,000, the 1-9 and 20-29 year age groups had similar rates (4.9 and 4.8 cases per 100,000, respectively) (Figure 17). Incidence rates for the remaining age groups ranged from 1.7 to 3.5 cases per 100,000. This represents a change from cases reported during 2010, when the incidence rate in the 1-9 year age group (14.6 cases per 100,000) was more than twice the rate of any other age group.

Race was not reported for 61% of giardiasis cases in 2011. Among those cases with information on race, rates were higher among the white population (1.7 per 100,000) than among the black or "other" race populations (0.8 and 0.7 per 100,000, respectively). A higher rate was seen among males (4.4 per 100,000) than females (2.8 per 100,000).

With 106 cases, the northern region experienced the largest proportion of cases and highest incidence rate (4.8 per 100,000), while the lowest rate occurred in the central region (2.0 per 100,000). By illness onset date, cases occurred throughout the year with a slight peak in the month of June (Figure 18). No outbreaks were attributed to *Giardia* during 2011.

